

BOYKO, V.P.

Study of changes in the quality of canned meat during storage.
Kons. i ov. prom. 14 no.11:33-35 N '59. (MIRA 13:2)
(Meat, Canned)

BOYKO, V.P.

Investigating the quality of canned meat stored for 20 years.
Kons.1 ov.prom. 15 no.2:24-26 F '60. (MIRA 13:5)
(Meat, Canned--Storage)

BOYKO, V.P., kand.tekhn.nauk; FOMIN, A.K., inzh.

Changes occurring in the quality of block frozen meat in case of
long-term storage. Khol.tekh. 39 no.2:30-32 Mr-Ap '62.
(MIRA 15:4)

(Meat, Frozen--Testing)

1.2300

33553

S/135/62/000/002/009/010

A006/A101

AUTHORS: Andreyev, K. P., Boyko, V. R., Engineers

TITLE: Multi-pass argon-arc welding of AMr 6 (AMg6) aluminum alloy structures

PERIODICAL: Svarochnoye proizvodstvo, no. 2, 1962, 33-34

TEXT: Multi-pass welding of 15 - 30 mm thick AMg6 alloys was performed with tungsten electrode, 5 - 6 mm in diameter, in argon atmosphere, on a-c. The same alloy was used for the filler wire, 5 - 6 mm in diameter. This large diameter reduced the hydrogen content in the seam on account of moisture adsorbed on the wire surface. The chamfer angle was 90°. The following technology was employed: pass one is performed with 400 - 500 amps current, without filler wire. This assures complete fusion of the edges in the weld root due to low flashing and deepening of the liquid pool into the base material zone (for strap welds) or through-welding (for butt welds). During heating the oxide film in the weld zone is fused from the bottom, and the arc and argon flow pressure produces a pool with a concave surface. The reciprocal motion of the torch promotes mixing of the molten metal and the oxide film on the surface, facilitat-

Card 1/2

33553

S/135/62/000/002/009/010

A006/A101

Multi-pass argon-arc welding ...

ing the penetration of the pool into the root. The subsequent passes are conducted under normal conditions with filler wire supplied to the arc zone. Micro-analysis of the weld joints shows that the weld metal consists of a normal bi-phase α and β structure of normal density. Failure during tension occurs in the base metal and the transition zone. The use of two-staged welding conditions, careful preparation of the part and filler wire surfaces, will make it possible to obtain satisfactory results as to the structure and operational load of the welded parts. There are 2 tables and 3 figures.

Card 2/2

L 5902-65 EPR/EMP(k)/EMP(a)/EWA(c)/EWT(d)/EWT(m)/EMP(b)/T/EWA(d)/EMP(w)/EMP(v)/
 ACCESSION NR: AP5017406 EMP(t) PI-4/PA-4 IJP(o) UA/0135/65/000/007/0019/0021
 EM/MJW/JD/EM/HW 621.791.052:539.4:669.715

AUTHOR: Boyko, V. R. (Engineer)

TITLE: Effect of reduction in planishing on the mechanical properties of welded joints in AMg6 alloy

SOURCE: Svarochnoye proizvodstvo, no. 7, 1965, 19-21

TOPIC TAGS: welding, aluminum alloy, aluminum alloy welding, TIG welding, weld planishing, weld property, planished weld property/AMg6 alloy

ABSTRACT: The effect of planishing on the mechanical properties of welded joints in AMg6 aluminum alloy has been investigated. Alloy specimens 1.2, 2.0, 2.5, or 3.0 mm thick, TIG welded with or without a filler, were planished with 25-35% reduction. The best results were obtained by planishing with 25% reduction, which increased the tensile strength by 1-2.5 kg/mm², leveled the weld surface, and reduced residual stresses. Specimens welded without a filler and planished with 25% reduction failed in the weld-adjacent zone or in the base metal at a strength of 30.8-32.8 kg/mm²; unplanished specimens mostly fail in the weld or weld-adjacent zone at a strength of 28.8-30 kg/mm². Increasing the reduction over 25% has little or no effect on the

Card 1/2

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ACCESSION NR: AP5017406

strength but decreases the bend angle and creates compression stresses in the weld. On the other hand, reduction under 25% does not completely eliminate the deformations caused by welding. Planishing in the direction perpendicular to the weld produced less satisfactory results. Orig. art. has: 2 figures and 2 tables. [ED]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: M4, IE

NO REF SOV: 001

OTHER: 000

ATD PRESS: 4053

Card

2/2

I 43073-56 FWT(m)/FWP(k)/T/FWP(v)/FWL(t)/FTI TJP(c) WJ/ND/AM/NG	
ACC NR: AP6015105	(N) SOURCE CODE: UR/0135/66/000/005/0023/0024
AUTHOR: <u>Boyko, V. R. (Engineer)</u>	
ORG: none	33 B
TITLE: <u>Brazing aluminum bronze</u>	
SOURCE: Svarochnoye proizvodstvo, no. 5, 1966, 23-24	
TOPIC TAGS: metal brazing, silver solder, metal soldering / POS 61 solder, P200A solder, PSr45 silver solder	
ABSTRACT: The use of fluxes to remove the Al_2O_3 layer from the surface of aluminum bronze was studied. While these bronzes (AZh 9-4 and AMTs 9-2) have long been in wide-spread use, the technique of brazing them has not been sufficiently developed and investigated. In the present study, experiments were made with easily fusible solders and with a silver solder. In the experiments with easily fusible solders, the oxide layers were removed by emery paper and pickling in benzene or acetone or pickling in HNO_3, H_2SO_4, and $NaCl$. Solders POS-61 and P2--A were used. Fluxes 17, 19, 38H did not remove the oxide layer. Fluxes containing cadmium fluorine borate or zinc fluorine borate and NH_3 were found to be good solvents and to enhance the wetting properties of the surfaces to be soldered. Flux 59A was the most effective of all the fluxes tried.	
UDC: 621.791.3:669.35'6	
Card 1/2	

I 43073-66

ACC NR: AP6015105

In the silver brazing experiments, solder PSr45 used with flux F209 gave good results.
Orig. art. has: 2 tables, 3 figures.

SUB CODE: 11,13/ SUBM DATE: none

Card 2/2

KARPENKO, A.F., kand.ekon.nauk; DOBRYAKOV, N.V., kand.sel'skokhoz.nauk;
BOYKO, V.S., otv. za vypusk

[Planning replacements in a poultry flock and the output of poultry products; handbook on the methods of practical work for the course "Production organization in socialist agricultural enterprises" given by the Department of Animal Husbandry"] Planirovanie vosproizvodstva stada ptitsy i vykhoda produktsii ptitsevodstva; uchebno-metodicheskoe posobie dlia provedeniia prakticheskikh zaniatii po kursu "Organizatsiia proizvodstva v sotsialisticheskikh sel'skokhoziaistvennykh predpriiatiakh" na zootekhnicheskom fakul'tete. Novosibirsk, Novosibirskii sel'khoz.in-t, 1961. 11 p. (MIRA 14:7)

(Poultry)

BOYKO, V. S.

Boyko, V. S. and Zhukova, V. I. "Treatment of cabbage seeds with a fungicide preparation, HTUIF-1," Trudy nauch.-issled. in-ta ovoshch. khoz-va, Vol. 1, 1948, p. 274-80

SO: U-3264, 10 April 1953, (Letovis 'Zhurnal 'nykh Statey, No. 3, 1940)

BOING, V. S.

25745

Udobryeniya v Travopol' nov sistemye zymlyedyeliya. Y Sb: Michurinskuyu nauku--
Us. - kh. Proizvodstvo. Novosibirsk, 1949, S. 152-65

So: Letopis' No. 40

BOYKO, V.S.

Dynamics of nutrients in irrigated dark Chestnut soils of the Kulunda
Steppe. Trudy Biol. inst. Sib. otd. AN SSSR no.4:49-60 '59.

(MIRA 13:10)

(Kulunda Steppe--Soils)

(Kulunda Steppe--Irrigation farming)

SUDAREV, P.M.; BOYKO, V.S.; ARMAUTOV, N.V.

Amount of certain trace elements in soils and plant ash in
Novosibirsk Province. Izv.Sib.otd.AN SSSR no.11:93-95 '59.
(MIRA 13:4)

1. Novosibirskiy sel'skokhozyaystvennyy institut i Institut
geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
(Novosibirsk Province--Trace elements) (Soil chemistry)
(Plants--Chemical analysis)

KARPENKO, A.F., kand. ekon. nauk; DOBRYAKOV, N.V., kand. sel'khoz. nauk;
BOYKO, V.S., otv. za vypusk.

[Planning green fodder production; handbook on the methods of practical work for the course "Production organization in socialist agricultural enterprises" given by the Department of Animal Husbandry] Planirovanie zelenogo konveiera; uchebno-metodicheskoe posobie dlia provedeniia prakticheskikh zaniatii po kursu "Organizatsiia proizvodstva v sotsialisticheskikh sel'skokhoziaistvennykh predpriatiiakh" na zootekhnicheskoi fakul'tete. Novosibirsk, Novosibirskii sel'khoz. in-t, 1961. 5 p. (MIRA 14:7)
(Siberia, Western—Pastures and meadows)

L 36383-66 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) GG/JD

ACC NR: AP6014029

SOURCE CODE: UR/0056/66/050/004/0905/0910

AUTHOR: Boyko, V. S.; Garber, R. I.

ORG: Physicotechnical Institute, AN UkrSSR (Fiziko-tekhnicheskiy institut Akademii nauk Ukrainsskoy SSR)

TITLE: Determination of phenomenological parameters of the dislocation theory
of elastic twins in calcite

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 4, 1966,
905-910

TOPIC TAGS: crystal, crystal dislocation, surface tension, twinning, elastic twin

ABSTRACT: A method is proposed for determining the phenomenological parameters of the dislocation theory of the Peierls elastic twins and surface tension forces, based on a deformation diagram. The stress state of a band is calculated in the case corresponding to the deformation of a cylinder whose surface is subjected to forces directed in parallel to the generatrix and are constant along it under boundary conditions created in the experiment. For the first time it has been possible to retain the twin in the crystal by distributing the load. The Peierls' force was found to be 0.3—0.7 kg/cm² and the parameter M, characterizing the surface tension, was 3 kg/cm^{3/2}. From these quantities, the value of the surface energy of calcite can be

Card 1/2

L 36383-66

ACC NR: AP6014029

3

estimated as $\alpha \approx 10 \text{ erg/cm}^2$. The authors are pleased to express their gratitude to A. M. Kosevich and L. A. Pastur for their constant interest to this work and useful consultations, and L. A. Krivenko for assistance in the experimentation. Orig. art. has: 2 figures, 9 formulas, and 1 table. [Based on authors' abstract] [NT]

SUB CODE: 20, 11/ SUBM DATE: 11Nov65/ ORIG REF: 014/ OTH REF: .001

ms
Card 2/2

BOYKO, V.T.

Remove straw from fields in time. Mekh. sil'.hosp. 12 no.7:8-12
Jl '61. (MIRA 14:6)

1. Glavnyy inzh. upravleniya mekhanizatsii Glavnogo upravleniya
sovkhozov pri Sovete Ministrov USSR.
(Straw)

S/035/61/000/012/008/043
A001/A101

AUTHORS: Pyaskovskaya-Fesenkova, Ye.V., Boyko, P.N., Belyak, G.M., Boyko V.V.

TITLE: Some data on attenuation and dispersion of light at various altitudes above sea level

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 12, 1961, 33, abstract 12A285 ("Izv. Astrofiz. in-ta AN KazSSR", 1961, v. 11, 78 - 88, Engl. summary)

TEXT: Brightness of daily sky on the Sun's almucantar was measured simultaneously at two points $\theta = 57$ and 60° at the Mountain - Observatory of the Astrophysical Institute, AS KazSSR, and on the Kumbel' mountain. A visual photometer and a photoelectrical photometer with selenium photoelement were used. Transparency coefficients (P), optical thicknesses of atmosphere (τ) and scattering indicatrices $\mu(\theta)$ were determined from the measurement data. It is noted that transparency coefficients over the lowland and mountains differ only slightly. Linke's turbidity factor increases in afternoon hours in comparison with morning

Card 1/2

Some data on attenuation ...

S/035/61/000/012/008/043
A001/A101

hours, and this increase is more noticeable at the Observatory than on the Kumbel' mountain. Absolute scattering indicatrices on the Kumbel' mountain on 29 August prior and after noon increased by 30 - 35%.

V. Golikov

[Abstracter's note: Complete translation]

Card 2/2

45164
S/188/63/000/001/007/014
B187/B102

AUTHOR: Boyko, V. V.

TITLE: Degenerate parametric amplifier with a synchronous pump generator

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1963, 43-50

TEXT: A single circuit parametric amplifier with non-autonomous pump generator is studied theoretically and experimentally under synchronous operation and feedback. Synchronous operation demands that the optimum phase relations remain stable over a certain frequency detuning range. This is achieved by having the second harmonic of the amplifier output signal drive the pump generator. The differential equations describing the system are set up in dimensionless variables; the input signals are assumed to be sufficiently weak, and the equations are solved by the method of slowly changing amplitudes: $\frac{U}{U_0} = A \cos(pt + \psi)$ and

Card 1/4

Degenerate parametric amplifier ...

S/188/63/000/001/007/014
B187/B102

$\frac{V}{V_0} = B \cos(2\pi t + \eta)$ where A, B, η and η change slowly with time. If operation is steady, algebraic relationships for these quantities can be derived from the differential equations. Under certain restrictive conditions resulting from the low intensity of the input signal the following equation can be derived from the above algebraic relationships:

$$B = 1 + \frac{1}{2\delta_0} \sqrt{k^2 A^4 - 16} \quad \delta_0 \text{ is the attenuation, } k = 4\omega_0^2 K_0 V_0, \text{ and}$$

$$\xi = \frac{p^2 - \omega_0^2}{2p^2} \text{ is the detuning. If the pump generator amplitude is constant, then for } \xi = 0, A_0^2 = \frac{\lambda^2}{\delta^2(1-\sigma)^2}, \text{ where } \lambda = \frac{\varepsilon}{V_0}; \sigma = \frac{m}{m_0} \text{ is}$$

the regeneration factor, m being the modulation factor; and, in general,

$$A = \left[\frac{(1+\sigma^2)\lambda^2 + 2\sigma \sqrt{\lambda^4 - 4} \delta^4 k(1-\sigma^2)^2}{\delta^2(1-\sigma^2)^2} \right]^{1/2} \text{ with } x = 2/k$$

Card 2/4

Degenerate parametric amplifier ...

S/188/63/000/001/007/014
B187/B102

Using the relative detuning $\Delta = \frac{\omega - \omega_0}{\omega_0}$, the relative transmission factor

can be expressed as $\frac{N}{N_0} = \frac{1 + \sigma^2 + 2\sigma \sqrt{1 - \Delta^2}}{(1 + \sigma)^2}$. The fluctuation of this

coefficient in the synchronous operation range does not exceed 3 db. For

the phase characteristic, $\psi = \cos^{-1} \left(\frac{\Delta \sigma}{\sqrt{1 + \sigma^2 + 2\sigma \sqrt{1 - \Delta^2}}} \right)$ is obtained. The

theoretical results were checked experimentally on a crystal diode parametric amplifier. All qualitative features of the system were confirmed: Synchronous operation is stable in a band of 0.1% of the resonance frequency, when the signals are of $\approx 1 \mu\text{v}$, and the regeneration factor is near the critical value. In the range of synchronous operation, the amplification depends little on the detuning. When the signal strength increases, self-excitation is possible if the pump generator is not stable. Amplification without noticeable distortion is achieved in amplitude modulation with synchronous operation. Beats occur outside the synchronous operation limits. When the amplification is great, the usual

Card 3/4

Degenerate parametric amplifier ...

S/188/63/000/001/007/014
B187/B102

biharmonic state is set up. There are 4 figures.

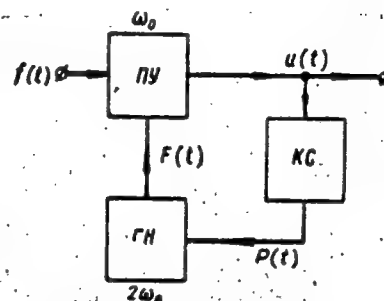
ASSOCIATION: Kafedra teorii kolebaniy (Department of Theory of Vibrations)

SUBMITTED: April 30, 1962

Fig. 1. Block diagram of the apparatus

Legend: $\Pi\gamma$ - parametric amplifier,
 ΓH - pump generator, KC - synchronizing
channel, $f(t) = \epsilon \cos pt$, $F(t) = \frac{V}{V_0}$,

$$P(t) = K_0 \frac{d^2}{dt^2} (U^2), K_0 - \text{feedback factor.}$$



Card 4/4

S/185/63/008/001/020/024
D234/D308

AUTHOR: Boyko, V. V.

TITLE: Diffusion of nitrogen into liquid oxygen

PERIODICAL: Ukrayins'kyi fizychnyy zhurnal, v. 8, no. 1, 1963,
135-137

TEXT: The author describes an equipment for diffusion measurements by the gas phase method. The mean value of the coefficient of diffusion of N_2 into liquid O_2 , measured with the aid of this equipment at $77.8^\circ K$, is $(2.8 \pm 0.1)10^{-5} \text{ cm}^2/\text{sec}$, which is 2.2 times larger than the value calculated from the Stokes-Einstein formula. This indicates that the latter formula is only valid for the diffusion of large molecules between small molecules. There are 2 figures.

ASSOCIATION: Fizyko-tekhnichnyy instytut AN HruzSSR, m. Sukhumi
(Physicotechnical Institute AS GSSR, Sukhumi)

SUBMITTED: July 10, 1962

Card 1/1

BOYKO, V.V.

Synchronization of self-oscillations in the presence of noises
in a system with quasi-parametric feedback. Vest. Mosk. un. Ser.
3: Fiz., astron. 18 no.4:47-55 J1-Ag '63. (MIRA 16:8)

1. Kafedra teorii kolebaniy Moskovskogo universiteta.
(Oscillations)

ACCESSION NR: AP4043801

S/0188/64/000/004/0071/0080

AUTHOR: Boyko, V. V.

TITLE: Fluctuating characteristics of a synchronous parametric amplifier under the influence of low interference

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1964, 71-80 *Vol. 19*

TOPIC TAGS: electronics, phase selectivity, parametric amplifier, signal-to-noise ratio, parametric feedback, synchronous amplifier, amplifier

ABSTRACT: Although a single-circuit parametric amplifier is advantageous because of its simplicity of design, it also has a number of disadvantages. These shortcomings are eliminated to a considerable degree when it incorporates a system for amplification with synchronous pumping. However, an evaluation must be made of the conditions ensuring the maximum signal-to-noise ratio at the output of the synchronous amplifier. In this paper the method of slowly changing amplitudes, with subsequent linearization of shortened equations for low noise and zero detuning, has been used in a study of the fluctuating characteristics of such a single-circuit parametric amplifier. Different

Card 1/3

ACCESSION NR: AP4043801

methods for synchronous pumping are also discussed. It is shown that the phase selectivity of a synchronous parametric amplifier makes it possible, in a regime of strong resonance, to improve the signal-to-noise ratio at its output in comparison with an amplifier having the same effective quality but not having phase selectivity. Among the devices for synchronization of pumping, preference should be given to systems with a parametric feedback, since they make full use of the amplification and filtering properties of the parametric amplifier itself. It is noted that the lag and inertia of filtering circuits in the feedback channel improve the noise factor of a synchronous amplifier. A system with a synchronous pumping generator, in the case of small signals and weak noise, almost fully ensures the freedom from interference associated with phase selectivity. Although these results were obtained for the simplest case of noise small in comparison with signal strength, it can be assumed that systems ensuring a high freedom from interference with a large signal-to-noise ratio should also retain their advantages in the case of signals whose strength is commensurable with the noise. "In conclusion, the author thanks Professor V. V. Migulin and Docent Yu. M. Az'yan for their interest in this study." Orig. art. has: 62 formulas.

Card 2/3

ACCESSION NR: AP4043801

ASSOCIATION: Kafedra fiziki kolebaniy Moskovskogo Universiteta (Department of
Vibration Physics, Moscow University)

SUBMITTED: 15Oct63

SUB CODE: EC

NO REF SOV: 008

ENCL: 00

OTHER: 001

Card 3/3

YUFIN, V.A.; BOYKO, V.V.

Elastic cup separators for products pipelines with a diameter of
100-150 mm. Transp. i khran. nefiti no.7:17-20 '63.

(MIRA 17:3)

L 59522-65 EWT(1)/EEC(b)-2/EWA(h) Pm-4/Peb/P1-4/Pj-4/P1-4

ACCESSION NR: AP5016628

UR/0188/65/000/003/0064/0072
621.396.621.324:621.375.93

AUTHORS: Boyko, V. V.; Dagayev, Yu. V.

TITLE: A receiver with a synchronous parametric amplifier

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 3, 1965, 64-72

TOPIC TAGS: amplifier bandwidth, parametric amplifier noise, amplifier selectivity, feedback amplifier, parametric amplifier

ABSTRACT: The authors present the results of a theoretical and experimental study of a receiver with a degenerate parametric synchronous mode amplifier in the input. The synchronous pumping was effected by a special feedback loop. Methods were investigated for overcoming the band narrowing in synchronizing the signal and pumping. The analytical study starts with the real time equation for a single circuit parametric amplifier. The steady state operation for strong resonance and inertia-free feedback is treated. It is noted that the presence of frequency selective elements in the feedback increased the dependence of the amplitude on the

Card 1/3

L 59522-55

ACCESSION NR: AP5016628

detuning. This defect could be overcome either by special phase-compensation networks in the feedback channel or by using a superheterodyne synchronous receiver in the network. An ordinary superheterodyne receiver with the special feedback loop was studied. With synchronizing by locking or by phase automatic frequency control, it was possible to use the oscillation of the intermediate frequency heterodyne for both synchronous detecting and for producing the synchronous pumping. Both the upper and lower tuning of the heterodyne were investigated. It was found that the upper tuning of the first heterodyne and the proper selection of the phase characteristics of the feedback and intermediate frequency channels produced a broad band of strong resonance. Using the same approach, a receiver with a pumping generator (synchronized by locking) was studied. The results indicated that the band of synchronous operation for the upper tuning could be increased more than the band resulting from lower tuning of the first heterodyne. This experiment was conducted on a standard centimeter-band receiver with a feedback circuit. A mixer diode was used for multiplying the signal and the basic harmonics of the first heterodyne, while the frequency component was used for locking the pumping klystron. The band width for upper tuning was 1.5 Mc, for lower tuning 0.9 Mc. The experimental and theoretical agreement was good, indicating that the upper tuning was advantageous. The experiment also proved the stability in the synchronous operation. Further broadening of the band could be accomplished by using phase and frequency automatic controllers in the heterodyne circuits. In this receiver the noise factor

Card 2/3

L 59522-65

ACCESSION NR: AP5016628

3
was reduced to the undegenerate circuit level while the retuning qualities and noise-free nature of the degenerate circuit were preserved. The receiver may be useful in communication and radar systems. The authors thank Professor V. V. Migulin and Docent Yu. M. Az'yan for their interest in this work. Orig. art. has: 2 figures and 25 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet, Kafedra fiziki kolebaniy
(Moscow State University, Department of Vibration Physics)

SUBMITTED: 15Apr64

ENCL: 00

SUB CODE: EC

NO REF SOV: 006

OTHER: 000

llc
Card 3/3

TROPP, M.Ya.; SINILOVA, N.G.; BEZRUK, P.I.; BOZHKO, N.G.; BOYKO, V.Ya.

Stability of ergometrine maleate in tablets and ampoules. Apt.
delo 9 no. 5:9-13 S-O '60. (MIRA 13:10)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevtiche-
skiy institut.

(ERGONOVINE)

BOYKO, V. Ye., inzhener

Steepness of slope in ballast cross sections. Transp. stroi. 5
no. 6:19 Ag'55. (MIRA 8:12)

(Ballast)

PHASE I BOOK EXPLOITATION

SOV/5795

Boyko, V. Ye.

Chernaya metallurgiya SSSR v 1959 - 1965 gg. ; po materialam publichnoy lektsii ... (Soviet Ferrous Metallurgy in the Years 1959 - 1965; According to Materials Taken From Public Lectures ...) Moscow, Metallurgizdat, 1960. 43 p. Errata slip inserted. 3200 copies printed.

Eds. : V. V. Nikonov and I. G. Pashko; Ed. of Publishing House: A. I. Brushteyn; Tech. Ed. : L. V. Dobuzhinskaya.

PURPOSE: This booklet is intended for technical personnel, foremen, and workmen of ferrous-metallurgy plants.

COVERAGE: The booklet discusses the proposed course of development of Soviet ferrous metallurgy during the 1959-1965 [Seven-Year Plan] period. Questions on the development of iron-ore production, the concentration of

Card 1/3

Soviet Ferrous Metallurgy (Cont.)

SOV/5795

industrial production activities, and the introduction of new techniques and advanced methods are reviewed. Illustrations and diagrams represent the anticipated growth in industrial development and production of ferrous metals. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Introduction	3
Target Figures in the Development of Ferrous Metallurgy for the 1959-1965 Period	6
Industrial Buildup	11
The Ore-Mining Industry	16
Card 2/3	

BOYKO, V.Ye., aspirant

High-temperature heat treatment of reinforced concrete products
in molds under atmospheric pressure. Sbor. trud MISI no.37:45-74
'60. (MIRA 13:8)
(Electric heating) (Reinforced concrete)

BOYKO, V. Ye., aspirant, MIRONOV, M. I., inzh.

Investigating efficient methods for molding large panels in
vertical molds. Sbor. trud MISI no. 37:75-105 '60.
(MIRA 13:8)

(Concrete slabs) .

MEKRTUMYAN, A.K., kand.tekhn.nauk; BOYKO, V.Ye., inzh.

Vibration packing of concrete mixes in vertical molds. Mekh.stroi.
17 no.5:16 My '60. (MIRA 13:7)
(Vibrators) (Concrete)

BOYKO, V. Ye.

Cand Tech Sci - (diss) "Study of the technology of manufacturing large concrete and reinforced-concrete panels in vertical cassette forms." Moscow, 1961. 20 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Motor Vehicle and Road Inst); 150 copies; price not given; (KL, 6-61 sup, 214)

KOROBOV, P.I.; KHLIBNIKOV, V.B.; BORISOV, A.F.; SKOCHINSKIY, A.A.; SHEVYAKOV, L.D.; MELNIKOV, N.V.; MELESKIN, S.M.; MOSKAL'KOV, Ye.F.; POKROVSKIY, M.A.; KAPLUNOV, R.P.; BOGOLYUBOV, B.P.; ALOTZUNOV, N.B.; BOYKO, V.Ye.; BELINZA, N.K.; FIDOROV, V.F.; AGOSIKOV, N.I.; BALCHENKOV, A.V.; VORONIN, L.N.; IPATOV, P.M.; HAZAROV, P.P.; SLUTSKAYA, O.N.; CHERNIENKO, M.B.; RABINOVICH, V.I.; SHALVSKIY, V.N.; TROITSKIY, A.V.; GOL'DIN, Ya.A.; DZHAPARIDZE, Ye.A.; ZHURAVLEV, S.P.; KUZNETSOV, K.K.; MALEVICH, N.A.; MARINENKO, M.P.; LANTYMOV, G.P.; NATALOV, P.F.; PERETSAV, M.A.; ROSSETT, A.F.; KYASHOV, A.A.; SOSEDOV, O.O.; VILCHADOV, V.S.; ZUBALEV, S.N.; SHAFARENKO, I.P.

Nikolai Nikolaevich Patrikeev; an obituary. Gor.zhur. no.6:76 Je '60.

(MIRA 14:2)

(Patrikeev, Nikolai Nikolaevich, 1890-1960)

BOYKO, V.Ye.

Using natural gas in metallurgy. Gaz. prom. 10 no.1:5-7 '65.
(MIRA 18:1)

BOYKO, Ya. V., agronom.

Varying production norms and constant coefficients. Nauka i pered.
op. v sel'khoz. 6 no.11:50-51 N '56. (MLRA 10:1)

1. Shatunovskaya lugo-meliorativnaya stantsiya, Zalesovskiy rayon,
Altayskogo kraya.

(Plowing) (Tillage)

~~BOYKO, Yev;~~ PALIOKHA, I., kand.sel'skokhozyaystvennykh nauk; KOLOSHA, O.,
kand.sel'skokhozyaystvennykh nauk

Large-scale experiments on collective farms. Nauka ipered. op.
v sel'khoz. 8 no.9:48-49 S '58. (MIRA 11:10)

1. Nosovskoye otdeleniye opytnogo khozyaystva Chernigovskoy
gosudarstvennoy sel'skokhozyaystvennoy stantsii. 2. Zaveduyushchiy
otdelom polevodstva Chernigovskoy gosudarstvennoy sel'skokhozyaystven-
noy stantsii (for Boyko).

(Agriculture--Experimentation)

Boyko, Ye. B.

AID Nr. 983-4 5 June
PRODUCTION OF FERROMANGANESE METAL-POWDER COMPOSITIONS (USSR)

Frantsevich, I. N., and Ye. B. Boyko. Poroshkovaya metallurgiya, no. 2,
Mar-Apr 1963, 96-103. S/226/63/000/002/013/014

Several methods of obtaining sintered Fe-Mn alloys and powders with various manganese contents have been tested at the Institute of Powder Metallurgy and Special Alloys of the Ukrainian Academy of Sciences. The compacting of powders of iron and MP-1 manganese metal, electrolytic manganese (99.81% Mn, 0.08% C), or ferromanganese with 67.7 to 86.3% Mn and 0.3 to 6.2% C and subsequent sintering at 1100-1170°C for 8 hrs in a hydrogen atmosphere produced alloys with oxide inclusions which could not be eliminated by the use of very dry hydrogen, vacuum, or sintering prolonged to 24 hrs. Because of the oxides, subsequent impregnation of sintered articles proved to be difficult. The thermal diffusion method, i. e., the impregnation of green iron powder compacts with Mn at temperatures from 850 to 1050°C for 1 to 3 hrs in airtight containers packed with a mixture of ferromanganese (86.5% Mn), roasted aluminum oxide, and ammonium chloride (5% max) produced better results. It was found that impregnation with

Card 1/2

AID Nr. 983-4 5 June

PRODUCTION OF FERROMANGANESE [Cont'd]

S/226/63/000/002/013/014

Mn proceeds rapidly in the first 1.5-2 hrs and is not intensified by either prolonging the exposure to 5 hrs or raising the temperature above 1050°C. No oxides were found in the impregnated layer. Alloys prepared by this method could be used for subsequent impregnation with other substances. The most satisfactory results were obtained by the diffusion saturation of loose Fe powder with Mn. In this method, alternate layers (3 to 15 mm thick) of loose iron and manganese powders were sintered at temperatures from 850 to 1050°C in a ceramic container. Powder flakes produced at 800-850°C are easily pulverized; those produced at or above 900°C cake and must be ground. This hardens the powder and impairs its ability to compact. Compacting of Fe-Mn powders is generally more difficult than Fe powders. Since the powder is hygroscopic and oxidizes with prolonged storage, it should be protected against moisture. [MS]

Card 2/2

BOYKO, Ye. B.; FRANTSEVICH, I. N.; TEODOROVICH, O. K.

"Sintered parts of construction made from iron and copper."

Report presented at the Conference on Powder Metallurgy, Krakow,
Poland 19-21 Sept 63.

ACC NR: AR6005799

SOURCE CODE: UR/0137/65/000/010/G033/G033

AUTHOR: Frantsevich, I. N.; Teodorovich, O. K.; Boyko, Ye. B.

TITLE: Structural powder-metal products based on iron and copper

SOURCE: Ref. zh. Metallurgiya, Abs. 10G234

REF SOURCE: Sb. Poroshk. metallurgiya i metalloobrabotka, Yerevan, 1965, 35-49

TOPIC TAGS: powder alloy, iron base alloy, copper base alloy, porosity, *FABRICATED*
STRUCTURAL METAL

ABSTRACT: The results of an investigation of the processes of producing Fe-Cu powder alloys treated with Zn, Mn and C by the infiltration method are presented. The structure of Fe-Cu alloys is characterized by the presence of macro- and microscopic defects (porosity, looseness, etc.). These defects are of diffusion origin and are associated with imperfections of intercrystalline boundaries. Treatment with Zn, Mn and C affects beneficially the structure of these alloys. Data on the physical and mechanical properties of the infiltrated alloys following various types of heat treatment are presented. The principal considerations regarding an improved utilization of structural Fe-Cu materials with defect-free structure for the fabric-

Card 1/2

UDC: 669.1'3:621.762.001

L 12040-66

ACC NR: AR6005799

ation of strong and plastic machine parts are described. I Brokhin. [Translation of
abstract]

SUB CODE: 11, 13

Card 2/2

BOYKO, YE.G.

Mbr., The Don-Kuban Experiment Fishery Station, Rostov-on-Don, -1946-.

"Age Determination in Fishes, Based on Examination of Finray Sections," Dok. AN, 53, no.5, 1946

BOYKO, Ye.G., professor.

Effectiveness of natural propagation and principal ways of reproduction of the pike perch in the Sea of Azov. Trudy VNIRO 31 no.2: 108-137 '55.
(MLRA 9:8)

1. Dono-Kubanskaya stantsiya Azovsko-Chernomorskogo nauchno-issledovatel'skogo instituta rybnogo khozyaystva i okeanografii.
(Azov, Sea of--Perch)

BOYKO, Ye.G.

Principal factors determining fluctuations in the stocks of sturgeons and other commercial fishes caught by fine-meshed nets in the Sea of Azov. Trudy sov. Ikht. kom. no.13:147-157 '61.
(MIRA 14:8)

1. Azovskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva -(AzNIIRKh)
(Azov, Sea of—Fisheries)

BOYKO, Ye.G.; MAKAROV, F.V.

Evaluation of the effectiveness of commercial cultivation of
young Don pike perch and bream. Trudy AzNIIRKH no.6:253-281
'63.
(MIRA 17:8)



BOYKO, Ye.G.

Taking meteorological factors into consideration in high-accuracy
radiogeodetic surveying. Izv.vys.ucheb.zav.; geod. i aerof. no.1:65-
73 '64.
(MIRA 17:12)

BOYKO, Ye.G.

Adjustment of radio-geodesic nets on an accessory plane. Geod.
i kart. no.2:7-14 F '64.
(MIRA 17:3)

BOYKO, Ye.G.

Distribution of errors in the equations of coordinates in
angular and linear nets. Geod. i kart. no.4:7-17 Ap '64.
(MIRA 17:8)

BOYKO, Ye.G., prof.

Forecasting the abundance and catch of the Azov pike perch. Trudy
VNIRO 50:45-88 '64. (MIRA 17:12)

Evaluation of natural mortality of the Azov pike perch. Ibid.:143-161

AFENDULOV, K.P., kand. sel'skokhoz. nauk; BOYKO, Ye.I., kand. sel'skokhoz. nauk; PEREMERAY, Ye.A., kand. sel'skokhoz. nauk; PODURAZHNYI, P.K. kand. sel'skokhoz. nauk; PONOMARENKO, F.K.

Practices in the intensive use of land. Zemledelie 27 no.6:15-20 Je '65.
(MIRA 18:9)

1. Chernigovskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya. 2. Glavnyy agronom opytnogo khozyaystva Chernigovskoy oblastnoy sel'skokhozyaystvennoy stantsii (for Ponomarenko).

BOYKO, Ye. I.

"Formulating the Problem of Skill and Habits in Contemporary Psychology,"
Sovets. Pedagog., 19, No.1, pp 41-54, 1955

Translation M-850, 3 Nov 55

BOYKO, Ye.I.

More about skills and habits. Vop.psikhol.3 no.1:133-139 Ja-F '57.
(MIRA 10:3)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.
(Ability) (Habit)

BOYKO, YE.I.

Granular fertilizers have great possibilities for increasing the yield of burkhwheat
Sov. agron. 10 no.9, 1952

COUNTRY : USSR
CATEGORY :

M-6

ABR. JOUR. : RZBiol., No. 14, 1958, No. 87097

AUTHOR : Boyko, Ye. I.

INST. :

TITLE : Increased Production of Proteinous Feeds
in Growing Them for Green Fodder and
Silage.

ORIG. PUB. : Byul. sil'skogospod. inform., 1957,
No 1, 19-22

ABSTRACT : Data of Chernigov Agricultural Experiment
Station on yields of corn on planting it singly and in
admixture with leguminous crops. Maximum yield of green
crop in 1956 (364.9 centners/hectare) was obtained on
planting in hills, 45 x 45 cm, 5 plants per hill, corn and
white lupine. Corn planted together with peas yielded
488.7 centners/hectare of green crop containing 537 kg/
hectare of assimilable protein, as compared with 336 kg/
hectare, of the green crop of corn with a yield of 374.3
centners per hectare. Data concerning feed unit values
are presented and recommendations are made on technology
of mixed crop production. -- V. S. Shmal'ko.

CARD://

Boyko, Ye. I.

USSR/Cultivated Plants. Fodder Plants.

M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68202

Author : Boyko, E. I.

Inst : Nosovsk Selection Station.

Title : Agricultural Engineering and Fodder Significance of Perennial Grass.

Orig Pub : Byul. sil's'kogospod. inform. Chernig. obl. vid. t-va dlya poshir. polit. nauk. znan', 1957, No 2, 15-20

Abstract : Data of the Nosovsk Selection Station indicate that perennial grasses permit an increase in rye yields of 2.2-6.3 centners/hectare, and in oat yields of 2-4.1 centners/hectare. In Chernigov Oblast', clover mixed with timothy gives a hay yield of 24.8-37.5 centners/hectare, as against 15.7-24.6 centners/hectare of lupine

Card : 1/2

USSR/Cultivated Plants. Fodder Plants.

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68202

hay. After clover, there are 40.4 centners/
hectare of roots and stubble left in the
field, after a mixture of clover and timothy,
30.3, after clover mixed with esparsette and
timothy, 35.3, and after a vetch and oats mix-
ture, 18.5 centners/hectare. The agricultural
yields were highest when clover was used as the
preceding crop. -- M. K. Deulina

Card : 2/2

BOYKO, Ye.I., otv. red.; PONOMAREV, Ya.A., red.; DENOTKINA, L.S., red.;
TARASOVA, V.V., tekhn. red.

[Coterminous problems in psychology and physiology] Pogranich-
nye problemy psikhologii i fiziologii. Otv. red. E.I.Boiko.
Moskva, Izd-vo Akad. pedagog. nauk RSFSR, 1961. 210 p.

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut psikho-
logii. (MIRA 15:1)

(NERVOUS SYSTEM)

(REACTION TIME)

BOYKO, Ye.I.

From the history of the chronometric investigation of reactions. Vop. psikhol. 10 no.1:135-144 Ja-F'64 (MIRA 17:3)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.

L 55062-65

AM4046715

BOOK EXPLOITATION

S/

14
B41

Boyko, Yevgeniy Ivanovich

Reaction time of man; history, theory, present research and the practical significance of chronometric investigations (Vremya reaktsii cheloveka; istoriya, teoriya, sovremennoye sostoyaniye i prakticheskoye znacheniy khronometricheskikh issledovaniy) Moscow, Izd-vo "Meditsina", 1964. 439 p. illus., biblio., tables. 3000 copies printed. Editor: V. D. Bykov; Technical editor: A. M. Mironova; Proofreader: M. P. Holokova.

TOPIC TAGS: reaction time, human reaction time, chronometric research, voluntary human reaction, neurophysiology, neurocybernetics, verbal association

PURPOSE AND COVERAGE: This book was recommended for printing by the Editorial-Publishing Council of the Academy of Medical Sciences of the USSR. It is dedicated to the first conquerors of space - scholars, engineers, and technicians - the heroic cosmonauts. The book represents the first, and therefore incomplete, attempt to generalize and systematize data concerning human reaction time. The author expresses his deep gratitude to his colleagues M. M. Vlasova, E. A. Golubeva, T. N. Ushakova, and N. I. Chuprikova, and also to Corresponding Member

Card 1/3

L 55062-65
AM4046715

of the AMN SSSR Professor N. A. Bernshteyn and Active Member of the AMN SSSR Professor V. V. Parin. In addition, he thanks Active Member of the APN RSFSR Professor B. M. Teplov, Candidate of Medical Sciences Ye. S. Zav'yalov, and Candidate of Biological Sciences Ye. A. Doravyanko.

TABLE OF CONTENTS:

Ch. I. Purpose and methods of chronometric investigation of reactions - -	7
Ch. II. Initiation and development of a chronometric experiment - -	41
Ch. III. Mechanism of voluntary human reaction from the point of view of neuro-physiology and neurocybernetics - -	73
Ch. IV. Dependence of reaction time on peculiarities of the primary signal stimulus - -	170
Ch. V. Verbal-associative reactions - -	252
Ch. VI. Dependence of reaction time on factors of training, sex, age, and various influences on the organism - -	261
Ch. VII. Utilizing the reaction time as an indicator in laboratory research -	310
Appendix - -	400
Literature - -	417

Card 2/3

L 55008-65

ACCESSION Nr: AR5014449

field observations in the case of a travel-time curve of small length only makes it possible to detect zones of strong appearance of multiple water waves and in a number of cases an approximate determination of the interval of time when they dominate on the record. This interval changes in different areas. Obtaining data of only a general character is of great importance for geological interpretation. I. Bazovkins.

SUB CODE: ES

ENCL: 00

Card

3/3

L 36740-65 ENT(d)/EEC-1/EEG-2/ENG(c)/IMP(1)/EEG(g) Po-1/Pq-1/Pg-1/Fk-1
IJP(c) BB/GG/38

ACCESSION NR: AT5008646

S/0000/64/000/000/0280/0308

58
57
B+1

AUTHOR: Boyko, Ye. I.

TITLE: The modeling of cerebral functions and higher neurodynamics

SOURCE: Kibernetika, myshleniye, zhirn' (Cybernetics, thought processes, and life). Moscow, Izd-vo Mysl', 1964, 280-308

TOPIC TAGS: cerebral function modeling, higher neurodynamics, second signal system, dynamic nerve coupling, central nervous system, brain, modeling algorithm, cybernetics, Lyapunov operator

ABSTRACT: This is a critical survey article of the topic stated in the title, based on 3 Western and 22 Soviet references. After discussing the experimental methods, the mechanism of the second signal system, dynamic time-dependent coupling, the usefulness of various types of temporal couplings from the standpoint of information theory and neurocybernetics, and the algorithms describing certain typical forms of the second signal reaction, the author concludes that without the introduction of the Pavlovian concepts of the second signal system one cannot successfully model the functions of the human brain. A most satisfactory form of such second signal reaction for experimental studies and for the primary formulation for modeling purposes is the reaction of localization

Card 1/2

L 36740-6;

ACCESSION NR: AT5008645

of arbitrary visible objects specified by verbal coordinates. These types of reactions are based on dynamic nerve coupling, which appears especially during the course of interaction of previously produced generalized associations. Such reactions may be written down, for instance, in the operator form proposed earlier by A. A. Lyapunov (Problemy kibernetiki, no. 1, 1958). Orig. art. has: 8 formulas and 4 figures.

ASSOCIATION: none

SUBMITTED: 03Nov64

ENCL: 00

SUB CODE: LS, DP

NO REF SOV: 022

OTHER: 003

Bionics

3

Card

2/2

hs

BOYKO, Ye.I.

Can a machine think? Vop. psikhol. 11 no.1:149-151 Jan '65.
(MIRA 18:4)

1. Institut psikhologii Akademii pedagogicheskikh nauk ESRSR,
Moskva.

BOYKO, YE. P.

SHEYANOVA, F.R.; TUMANOV, A.A.; GLAZUNOVA, Z.I.; DEMIN, O.I.; FILIPPOVA, N.A.;
DUBROVSKAYA, T.F.; BOYKO, Ye. P.

Brief reports. Zav. lab. 23 no. 5: 544 '57. (MLRA 10:8)
(Radioisotopes--Industrial applications)
(Chemistry, Analytical)

L1636

S/080/62/035/009/010/014
D204/D307

11.0170

AUTHORS: Dorogochinskiy, A.Z., Viktorova, Ye.A., Shuykin, N.I.,
Boykova, Ye.P., and Malin, A.G.

TITLE: The effect of cycloalkenyl phenols on the stability
of a fuel containing unsaturated hydrocarbons

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 9, 1962,
2060 - 2064

TEXT: The stabilizing effects of: A) 3-methyl-4-(cyclopenten-2-yl);
B) 3-methyl-6-(cyclopenten-2-yl); C) 4-methyl-2-(cyclopenten-2-yl);
D) 2-(cyclohexen-2-yl); and E) 4-(cyclohexen-2-yl)-phenols were in-
vestigated, on a fuel containing ~15 % of unsaturated hydrocarbons,
over a period of 5 months, at $50 \pm 0.5^\circ\text{C}$. Five samples of fuel were
tested with the above additives (50 mg per 100 ml fuel), two addi-
tional samples were respectively treated with 10 g/100 ml of p-hydro-
xydiphenylamine and 50 mg/100 ml of inhibitor $\phi 4-16$ (FCh-16), and
one sample was kept as a blank. Each sample also contained steel
wire (with a surface area of 20 cm² per liter of fuel) and was open
to air via a capillary. Every month the samples were tested for tar
Card 1/2

The effect of cycloalkenyl ...

S/080/62/035/009/010/014
D204/D307

content and stability to heat (1 hour at 150°C). It was found that B and C inhibited tar formation, similarly to antioxidants p-hydroxydiphenylamine and FCh-16. The formation of sediments at 150°C was impeded by B and D. The additive B thus exhibits a twofold action. There are 3 tables.

SUBMITTED: May 30, 1961

Card 2/2

CA 30740, 46. V.

17

Iodometric determination of alkaloids in lupines. B. V. Bofko (Ukr. Agr. Inst., Kiev). Biokhimiya 15, 548-51 (1930).—The alkaloids from a sample (1.0 g.) of the seeds or vegetative organs are extd. by 15 ml. of a mixt. of 2 vols. H_2O and 1 vol. $CHCl_3$. After the addn. of 1 ml. 15% $NaOH$, the sample is set aside, with periodic shaking, for 10 hrs. The mixt. is filtered, and the residue on the filter washed 4 times. The filtrate is treated with 10 ml. 1% HCl . in a separatory funnel, with shaking. After sepn., the lower, colorless layer contains the alkaloids. The extn. is repeated 4 times with 25 ml. 1% HCl . To 10 ml. of the alkaloid soln. is added 5 ml. of a satd. soln. of $NaHCO_3$, and 3 min. later, 5 ml. of 0.01 N I and 0.5 g. KI . The flask is placed in a dark place for 15 min., 10 ml. of 10% H_2SO_4 is added, and the excess I is titrated with 0.01 N $Na_2S_2O_3$. In calcn., the mol. wt. of yellow lupines is taken as 169, and that of blue and white 174. H. Priestley.

1967

BATKIS, Grigoriy Abramovich [Batkis, H.A.], prof.; POZNANSKIY, S.S.
[Poznans'kyi, S.S.], red.; BOYKO, Ye.P. [Boiko, IE.P.],
red.

[First steps in the organization of Soviet public health in
the Ukraine, 1918-1922] Pershi kroky budivnytstva radians'koi
okhorony zdorov'ia na Ukraini (1918-1922 rr.) Kyiv, Derzh-
medvydav URSR, 1964. 45 p. (MIRA 18:1)

8/601/62/000/016/029/029
E111/E451

AUTHORS: Svechnikov, V.N., Kocherzhinskiy, Yu.A., Shurin, A.K.,
Pan, V.M., Spektor, A.Ts., Kobzenko, G.F., Boyko, Yu.A.
TITLE: Equipment for the physico-chemical investigations on
high-melting chemically active metals
SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metal'fyziky.
Sbornik nauchnykh rabot. no.16. Kiev, 1962. Voprosy
fiziki metallov i metallovedeniya. 220-230

TEXT: The following equipment has been developed over several
years in the Otdel metallovedeniya (Department of Science of
Metals) of Institut metallofiziki AN UkrSSR (Institute of Physics
of Metals AS UkrSSR) for studying alloys such as chromium-niobium-
vanadium: 1) Arc furnace, including casting facilities, in which
evacuation to 10^{-2} mm is followed by admission of argon to a
pressure of 0.2 atm. [Abstracter's note: 10^{-2} mm is a very poor
vacuum and the equipment would not work as described.] The argon
is then purified in the furnace by a molten titanium getter.
A rotary arrangement enables a clean section of the inspection
window to be moved into position without breaking the vacuum.
2) Argon purification plant in which air and moisture are removed
Card 1/2

Equipment for the physico- ...

S/601/62/000/016/029/029
E111/E451

by calcium chips at 700 to 750°C, through which a 250 litre batch of gas circulates by convection. 3) Installations for annealing specimens in vacuum or argon at temperatures up to 1000°C and up to 2500°C respectively. 4) An installation for differential thermal analysis in an inert medium at temperatures up to 2000°C with novel arrangements for the thermocouple transmitter, thermostat and furnace and taking 0.5 to 1.5 g specimens. Calibration is effected by melting pure metals, the calibration curve then automatically compensating for systematic errors. 5) An inert atmosphere quenching installation (maximum specimen temperature 1400°C). 6) Vertical inert-atmosphere dilatometer and differential dilatometer for temperatures up to 1500°C. There are 10 figures.

SUBMITTED: January 25, 1962

Card 2/2

BOYKO, Yu.A., inzh.; DOBROKHOTOV, V.I., inzh.; KISEL'GOF, M.L., kand.
tekhn.nauk; PATYCHENKO, V.S., inzh.; POGORELOV, B.F., inzh.;
TARELKIN, M.F., inzh.

Burning of lignite with a high moisture content. Elek. sta. 36
no.2:8-12 F '65. (MIRA 18:4)

BOYKO, Yu. G.

BOYKO, Yu. G.: "The morphology of the pancreas in hypertonic disease."
First Leningrad Medical Inst imeni Academician I. P. Pavlov.
Chair of Pathological Anatomy. Leningrad, 1956. (Dissertation
For the Degree of Candidate in Medical Sciences.)

Knizhnaya letopis', No. 39, 1956. Moscow.

BOYKO, Yu.G.

BOYKO, Yu.G. (Leningrad)

Morphology of the pancreas in hypertension [with summary in English].
Arkhn.pat. 19 no.12:18-29 '57. (MIRA 11:2)

1. Iz kafedry patologicheskoy anatomii (nav. - prof. M.A.Zakhar'yev-
skaya) i Leningradskogo meditsinskogo instituta imeni akad. I.P.
Pavlova.

(HYPERTENSION, compl.

arteriosclerosis of pancreas, review)

(PANCREAS, blood supply

arteriosclerosis in hypertension, review)

(ARTERIOSCLEROSIS, etiol. and pathogen.

pancreas, caused by hypertension, review)

BOYKO, Yu.G.

Hypertensive disease and diabetes mellitus. Sov.med. 21 no.5:61-65
My '57. (MIRA 10:7)

1. Iz kafedry patologicheskoy anatomii (sav. - prof. M.A.Zakhar'yev-
skaya) i Leningradskogo meditsinskogo instituta imeni akad. I.P.
Pavlova.

(HYPERTENSION, compl.

diabetes mellitus)

(DIABETES MELLITUS, etiol. and pathogen.
hypertension)

BOYKO, Yu.G. (Leningrad, Turbinnaya ul., d.7, kv.66)

Role of organic changes in the arterial system of the pancreas in the development of acute pancreatitis [with summary in English, pp.158-159]. Vest.khir. 79 no.7:42-46 J1 '57. (MIRA 10:10)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. M.A.Zakhar'yevskaya) 1-go Leningradskogo meditsinskogo instituta im. akad. I.P. Pavlova.

(PANCREATITIS, etiology and pathogenesis,
acute, arterial dis. of pancreas (Rus))

(PANCREAS, blood supply,
arterial dis. causing acute pancreatitis (Rus))

EXCERPTA MEDICA Sec 5 Vol 12/7 General Path. July 59

1950. THE ROLE OF NEUROCIRCULATORY DISTURBANCES IN DEVELOPMENT OF PANCREATIC NECROSES. (EXPERIMENTAL INVESTIGATION)
(Russian text) - Boyko Yu. G. - ARKH. PATOL. 1958, 20/11 (34-41)
Ilus. 3

The experiments were performed in 20 cats which received a 'sliding infiltration' by Višnevsky's method, consisting of an injection of 1-4 ml. of an adrenaline solution into the sheath of the splenic artery and the branches of the subventricular artery. In some experiments one of the arterial branches was also ligated. Even during the operation angiospasm were observed, which led to localized or diffuse necroses of the pancreas. These angiospasm showed a close resemblance to the changes in acute pancreatitis and hypertension in man. It is recommended to use this method as a model for neurovascular disorders of the pancreas.

Brandt - Berlin

BOYKO, Yu.G., kand.med.nauk (Leningrad)

Pathogenesis of chylous ascites. Klin.med. 37 no.8:142-145
Ag '59. (MIRA 12:11)

1. Iz kafedry patologicheskoy anatomii (zav. - prof.M.A.
Zakhar'yevskaya) i Leningradskogo meditsinskogo instituta
im. akad. I.P.Pavlova.

(CHYLOPERITONEUM, etiology)

(CHYLOTHORAX, etiology)

BOYKO, Yu.G.

Role of circulatory venous disorders of the pancreas in the
pathogenesis of acute hemorrhagic pancreatic necrosis.
Biul. eksp. i biol. med. 50 no. 8:50-54 Ag '60. (MIRA 13:10)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. M.A.
Zakhar'yevskaya) I Leningradskogo meditskogo instituta imeni
I.P. Pavlova. Predstavlena akad. N.N. Anichkovym.
(PANCREAS--DISEASES) (BLOOD--CIRCULATION, DISORDERS OF)

BOYKO, Yu.G. (Leningrad)

Morphological changes in the pancreas in cases of heart defects.
Ark.pat. 22 no.7:26-29 '60. (MIRA 14:1)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. M.A.Zakhar'-
yevskaya) I Leningradskogo meditsinskogo instituta imeni akad. I.P.
Pavlova.

(PANCREAS)

(HEART—DISEASES)

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Role of the vascular factor in the pathogenesis of acute
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(ARTERIES--DISEASES)

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Pathogenesis of acute hemorrhagic pancreonecrosis. Klin. med.
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BOYKO, Yu.G. (Leningrad, B-151, ul. Nalichnaya, 21, kv.87)

Case of metastasis of cancer of the hepatic duct to the tongue.

Vop.onk. 7 no.12:67-68 '61.

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(TONGUE--CANCER)

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1. Iz kafedry patologicheskoy anatomii (zav. - prof. M.A. Zakhar'yevskaya) I Leningradskogo meditsinskogo instituta imeni akad. I.P. Pavlova.

(LUNGS--TUMORS)

BOYKO, Yu.G., kand.med.nauk

Case of strangulated traumatic diaphragmatic hernia. Klin.
khir. no.6:68 Je '62. (MIRA 16:5)

1. Bol'nitsa No.1 Otyabr'skogo rayona Leningrada.
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BOYKO, Yu.G., kand.med.nauk (Leningrad)

Pathology of allergic myocarditis. Klin.med. no.1:124-127 '62.

(MIRA 15:1)

1. Iz bol'nitsy No.1 (glavnyy vrach S.V. Yevdokimov) Zhdanov-
skogo rayona Leningrada.

(ALLERGY)

(HEART--DISEASES)

BOYKO, Yu.G., kand.med.nauk (Leningrad)

Malignant form of pulmonary adenomatosis. Klin.med. no.4:130-133
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1. Iz bol'nitsy Oktyabr'skogo rayona Leningrada (glavnyy vrach
M.V. Perel'man).

(LUNGS--CANCER)

BOYKO, Yu.G. (Grodno)

Changes in the pancreas in myocardial infarct. Arkh. pat.
no.1:34-41 '63. (MIRA 17:10)

1. Iz kafedry patologicheskoy anatomii (zav.- kand. med. nauk
Yu. G. Boyko) Grodnenskogo meditsinskogo instituta.

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AUTHOR: Geguzin, Ya. Ye.; Boyko, Yu. I.

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TITLE: Effect of x-ray irradiation on interdiffusion in alkali halide single crystals

SOURCE: AN SSSR. Doklady, v. 172, no. 4, 1967, 820-822

TOPIC TAGS: irradiation effect, x ray irradiation, single crystal, ionic crystal, *ALKALI HALIDE*

ABSTRACT: An experimental investigation was made of the interdiffusion in alkali halide single crystals under conditions of diffusion annealing at constant irradiation. The three-layered A-B-A specimens were KCl-KBr and NaCl-NaBr systems. The thickness of crystal plate A was selected in such a way that the attenuation of the penetrated beam would be 50 to 70%. The thickness of A was 150-200 μ ; that of B, 2 mm. The diffusion in the A-B contact occurred under the effect of x-irradiation, while in the B-A contact the diffusion occurred under usual conditions because of the considerable thickness of B, which absorbed the radiation. The other conditions (temperature, annealing time) in A-B and B-A contacts were identical. In a KCl-KBr system at

Card 1/2

UDC: 537.226:539.219.3+537.311.33:539.219.3

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560° the effective diffusion coefficient in the irradiated specimens (D_{eff}), determined according to Motano, appeared to be lower than in nonirradiated specimens (D_0) by almost one order. With an increase in temperature the difference in diffusion coefficients D_{eff} and D_0 diminishes and at temperatures of 620 and 680° the diffusion coefficients were identical in irradiated and nonirradiated diffusion zones. The difference in effective diffusion coefficients is associated with the difference in the total volume of the diffusion pores observed in KBr crystal. The irradiation causing a decrease of effective diffusion coefficient facilitates the growth of the total volume of pores. A qualitative similar effect of x-irradiation upon the effective diffusion coefficient was also observed in NaCl—NaBr system. A definite contribution in decreasing the effective coefficient of interdiffusion can be made by the partial attenuation of the electrodiffusion field caused by conduction electrons. The field facilitates the displacement of the most slowly diffusing ion (in the KCl—KBr system the Cl^- ion). The decrease in the mobility of the Cl^- ion should lead to a decrease of the effective diffusion coefficient. Orig. art. has: 4 figures.

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Card 2/2